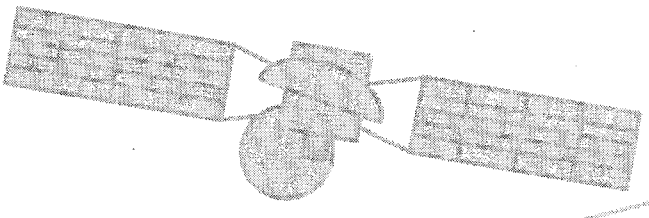
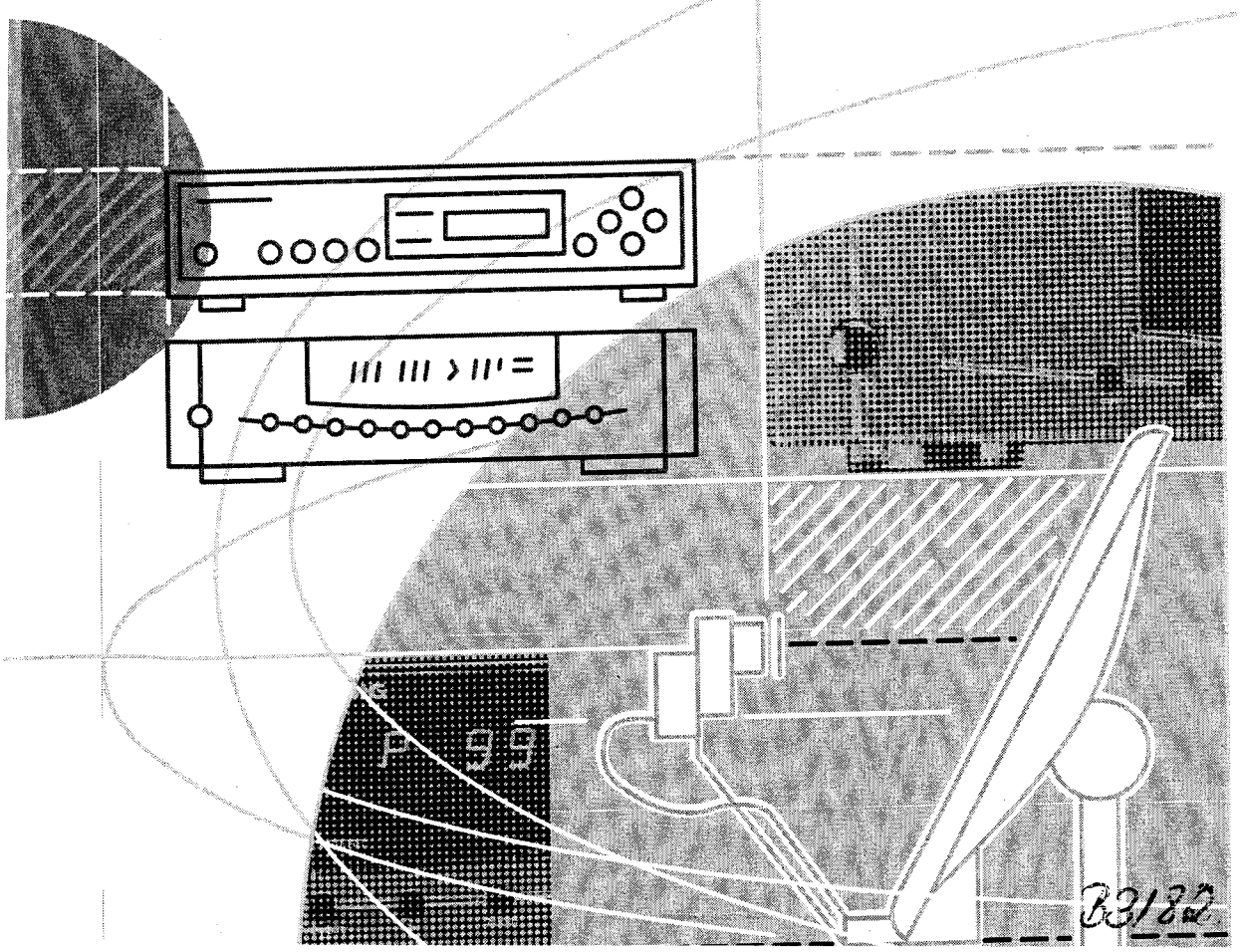
GRUNDIG

SATELLITE TV RECEIVER

STR 310
STR 320
STR 325
STR 410
STR 420





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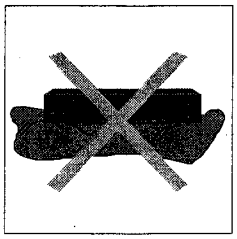
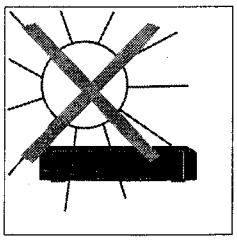
Important Safety Notice



Do not expose the receiver to dripping or splashing water.

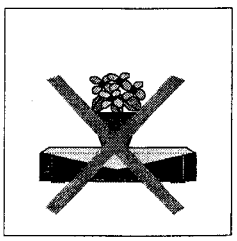
Do not allow moisture on or in the receiver.

Do not obstruct the receiver's ventilation slots.



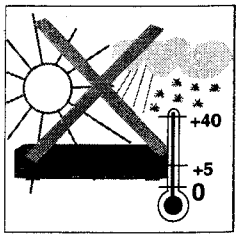
Keep the receiver away from excessive heat.
Heat build-up in the receiver is a source of danger and reduces the receiver's operating life.

When operating the receiver in a wall unit (or in a camper, for example), make sure there is a space of at least 10 cm around it for air to circulate.

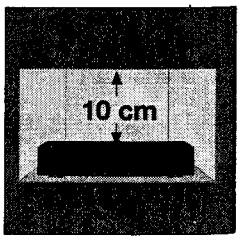


When not using your receiver for longer periods of time, e.g., at night, switch it off with the power button.
You will save energy.

Even when switched off, the receiver may be damaged by lightning striking the mains and/or aerial lead.
During a thunderstorm, you should always disconnect the mains and aerial plugs.



Clean the casing and the remote control by means of a soft cloth. Never use abrasive or chemical materials for cleaning.



Attention!
Exhausted batteries from the remote control do not belong in the household rubbish. They must be disposed of at a special waste collecting point.
This operating manual is printed on chlorine-free paper which helps to protect the environment.

The type plate is on the base of the receiver.

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Accessories Supplied

1 Stereo satellite receiver
1 Mains power lead
1 Aerial connection lead
1 Remote control handset
1 9 V, type 6F22 battery for the handset
1 User manual
1 F-connector for STR 310 and
2 F-connectors for STR 320 and 325, respectively
1 International IDENT DOCUMENT

If any of these items are missing or appear to be damaged, consult your dealer.

In addition, you should also have a suitable Satellite Dish already installed and aligned on the desired satellite (Astra, for example) with a cable provided to the intended site for the satellite receiver.

If your satellite aerial cable should not be provided with an F-connector, please use the connector supplied.

Satellite aerial installation and alignment is a complex and precision task and is best left to the professionals. Ask your dealer to provide and fit a suitable aerial.

Buttons, Controls and Connections on the Receiver

Front

The items ① to ④ are to be found behind the front flap.

① ⏻ Power switch (no mains separation!)

② Ⓐ Not used.

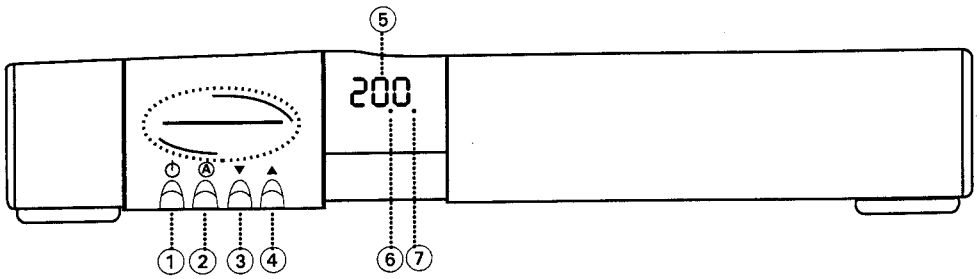
③ ▼ Down - selects the channel below the current channel.

④ ▲ Up - selects the channel above the current channel.

⑤ 200 Display - shows the current channel selected and the channel selection mode.

⑥ ▪ If timer is in operation.

⑦ ▪ If flashing clock is not set.

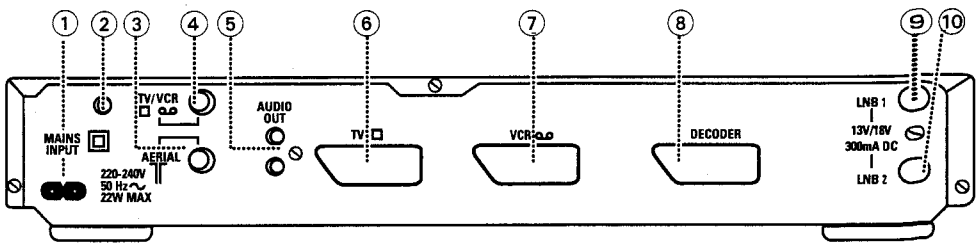


Buttons, Controls and Connections on the Receiver

Back

①	MAINS INPUT	Connect the mains power cable.
②		Channel adjustment (modulator).
③	AERIAL	Connect to your terrestrial TV aerial (VHF/UHF).
④		Modulator aerial output (VHF/UHF).
⑤	AUDIO OUT	Stereo audio output, left (L) and right (R) channel.
⑥	TV	EURO-AV (Scart) socket. Connect to auxiliary socket on a TV set.
⑦	VCR	EURO-AV (Scart) socket. Connect to auxiliary socket on a video recorder.
⑧	DECODER	EURO-AV (Scart) socket. Connect to an external decoder.
⑨	LNB 1	Connect to LNB on your dish aerial.
⑩	LNB 2	Connect to LNB on second dish aerial.

NOTE:
The LNB 2 connector (position 11) is provided on the STR 320 and STR 325.



Buttons on the Remote Control Handset

⏻ Switches the receiver on and off (standby).

① ... ⓪ Direct channel selection and direct entry of adjustable settings.

P+ Selects channel above currently selected channel. Increases adjustable settings.

P- Selects channel below currently selected channel. Decreases adjustable settings.

◀ ▶ Selects data.

ⓘ Displays data on the picture screen. Calls up the main menu. Returns to the main menu from higher menus without saving changes.

A/B Displays broadcast picture behind onscreen menu.

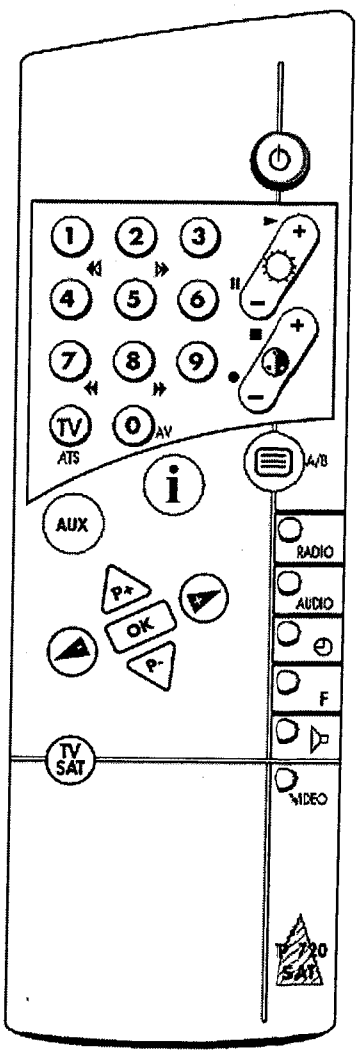
F Switches from Normal viewing mode to Favourite (favourite channels) and vice versa. Exits Radio mode into Favourite mode.

AUDIO Selects Audio (browse) mode.

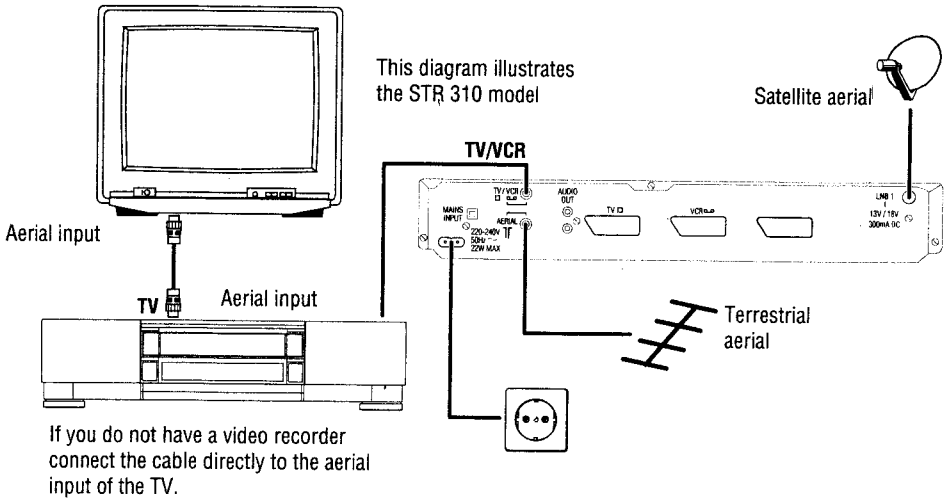
RADIO Selects Radio mode whilst automatically blanking the broadcast picture.

OK Commits the onscreen settings to memory.

TV/ATS Manual selection for external decoder.



Connection



Before connecting your receiver, please consult the important safety notice on page 1.

Connect the cable of your satellite aerial (dish) to the LNB 1 input socket (srew connector) at the back of the receiver.

If you have an STR 320 or STR 325 series receiver, you can connect a second dish aerial to the LNB 2 socket. This second aerial can be aligned on a different satellite.

Connect the mains power lead and the aerial leads to the TV set, the video recorder, and the terrestrial aerial as shown in the diagram above.

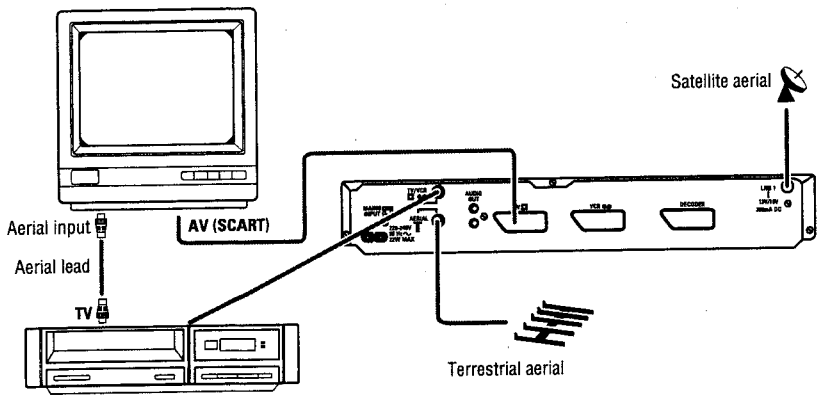
Connection

Connection with an EURO-AV Cable

Television

If your TV is provided with a EURO-AV input, you will get the best picture quality if you connect this input by means of a EURO-AV connecting lead (available from your dealer) to the TV socket of your receiver.

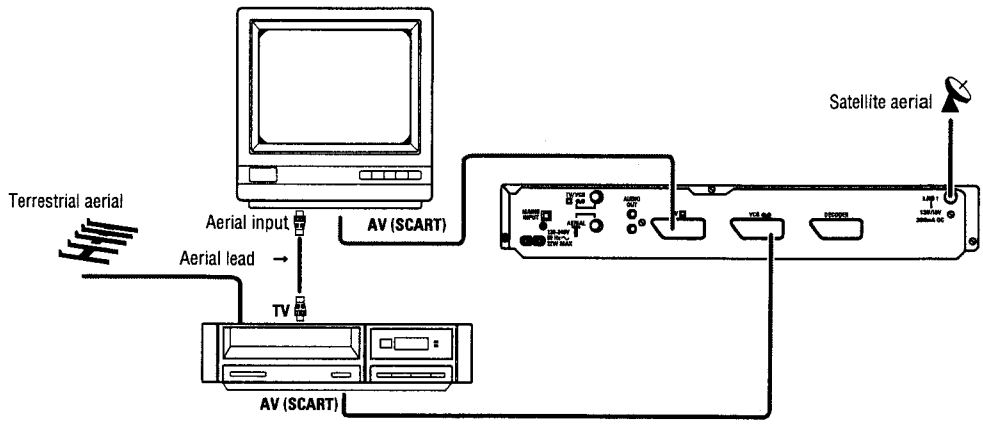
Please also refer to the user instructions of your TV set.



Connection

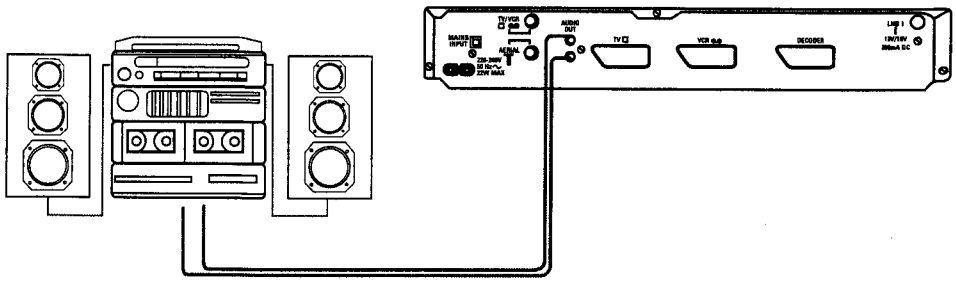
Video Recorder

If you have a video recorder provided with a EURO-AV socket, you will get the optimum recording quality if you connect the video recorder by means of a EURO-AV connecting lead (available from your dealer) to the VCR socket of the receiver. When playing a video cassette, the signal then will directly be passed to the television. The receiver's display will indicate »VCR«.



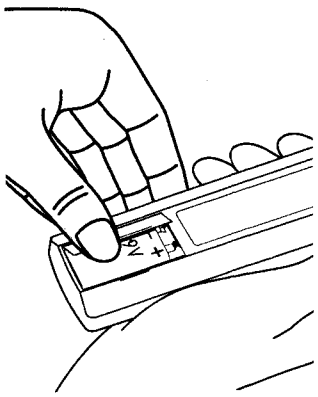
Connection to a HiFi Equipment

Best sound quality is obtained when connecting the receiver to HiFi equipment.
Connect the AUDIO OUT socket of your receiver via a phono (Cinch) cable (available from your dealer) to the HiFi amplifier. In this way, you will get most from the quality of the GNRS audio technology.



Preparation

Inserting the Battery into the Remote Control Handset



Fit the battery taking care to insert it the correct way round, as marked on the bottom of the battery compartment.
If the receiver does no longer correctly correspond to remote control commands, the battery might be exhausted.
It is absolutely necessary to remove an exhausted battery.
We can assume no liability for damage due to a leaking battery.

Switching On

Switch on your television.
Switch on your receiver by pressing the ⏻ button (under the flap).

Switching Off

Turn off the receiver by pressing the ⏻ button on the remote control handset or the ⏻ button on the front of the receiver.

Attention! Unless you are disconnecting the power lead, the receiver will not be disconnected from the mains (see chapter Important Safety Notice).

Preparation

Tuning the Televison and Video Recorder to the Receiver

This adjustment can be omitted if you have connected the receiver via a EURO-AV (Scart) connecting lead to the television or video recorder.

Select a free channel position on your TV and tune to UHF channel 37 (the receiver's output channel). For this, refer to the instruction book of your TV.

If this channel is already being used by a TV channel or a different unit (say, your video recorder), you will see interference if the other equipment is operating. Retune your TV to an unused part of its range close by (channel number 32 to 42) and then with a small screwdriver gently and slowly turn the small adjuster on the receiver rear panel, next to the TV/VCR socket, until your television displays a clear picture. Fine tune your TV for the best picture and sound.

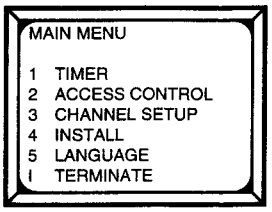
You will also have to tune in your VCR to the same UHF channel in the same way in order to record satellite TV programmes.

Settling In

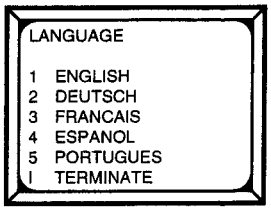
Language Selection

The STR series offers five language options for the menus shown on the screen. These are:

Englisch
German
French
Spain
Portugese



Press the ⓘ key on the remote control handset twice to select the MAIN MENU.
Press the numeric key ⑤ to select the LANGUAGE menu.
Press key ① to ⑤ for the appropriate language.
This automatically stores the selected language.



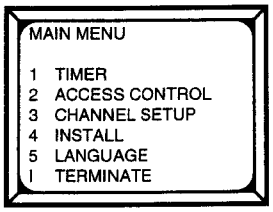
The 30 Favourite mode channels for this language are stored in the channel positions F 1 to F 30 (see table of favourite satellite channels).

Settling In

The Clock

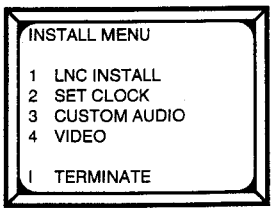
The receiver contains a clock which must be set to the correct day and time when the receiver is first plugged in or following a power cut.
A flashing dot on the front panel display indicates that the clock must be reset.

Press the ⓘ key on the remote control handset twice to select the MAIN MENU.



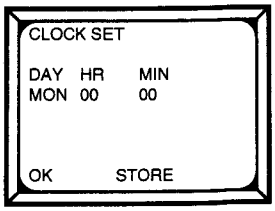
Then press key ④ and then key ②.
The CLOCK SET menu appears. The day of the week and time in hours and minutes is displayed with the day flashing to indicate it can be altered.

Use the P+ and P- keys to select the correct day of the week.



Press the ▶ key to move to the hours (it will start flashing).
Set the correct time (hours) with the P+ and P- keys.

Move to the minutes with the ▶ key (it will start flashing).
Set the correct value with the P+ or P- key.



You can go back to alter your settings with the ◀ key.

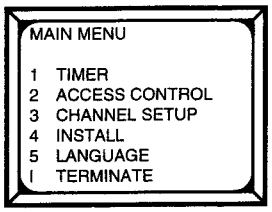
Press the OK key to store your settings and to start the clock.

Then press the ⓘ key twice to return to the broadcast picture.

LNC Adjustment

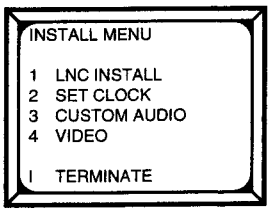
You must tune your receiver to match the used LNC.
Turn on your receiver and select a channel position with clear reception.

Press the ⓘ key on the remote handset twice.
This displays the MAIN MENU.



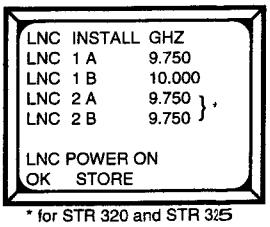
Now press the key ④ and then the key ①.
This displays the LNC INSTALL menu.

Now press the ▤ A/B key to see the broadcast picture behind the menu.
The LNC install screen displays the LNC local oscillator (LO) frequencies.
These will be set to the correct value for a particular type of LNC but may need to be fine tuned for your LNC.



Use the P+ and P- keys to vary the frequency in each direction and watch the picture, particularly brightly coloured areas. When the LNC LO is off-tune, black or white speckles (sparklies) are produced on the picture. Adjust the frequency back and forth to give the least sparklies of either colour or to remove all the sparklies.

For the STR 320 and STR 325 series receivers, repeat this adjustment for the second LNC.



* for STR 320 and STR 325

With the VOLTAGE ON/OFF menu option you can switch on and off the LNC' s power supply by means of the P+ or P- key.

Press the OK key to store the settings.

Press the ⓘ key twice to exit the menu.

HINT
If your unit shows RTL 2 when it should show ZDF, you have the incorrect LNC fitted. This can be corrected for by altering the LNC LO from 9.750 to 10.000 by means of the numeric keys and then fine tuning it as before.

HINT
Increasing the LNC LO frequency will reduce the number of white sparklies and decreasing the frequency eliminates the black sparklies.

Operation

You can of course also receive programmes which are not preset in the receiver's memory (see chapter "Channel Setup".).

How to change these preset channels can be found in the chapters Selecting Your Favourite Satellite Channels and Selecting Your Favourite Radio Channels.

Status Message on the Picture Screen

Pressing the ⓘ key once will provide on screen a status message advising Channel Number, Channel Name, Time and access to the Main Menu.

The Favourite Mode

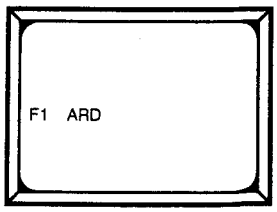
When you first turn on your receiver it is in the Favourite mode. This gives you access to 30 channels on the channel positions F 1 to F 30 most suited to the language option selected.

Step-by-step channel selection

You can select these channels step by step using the P+ and P- keys on the handset or the ▼ and ▲ keys on the receiver's front panel behind the flap.

The number of the channel position currently selected in the favourite mode is shown in the display of the receiver. An F is displayed before the number to remind you that the receiver is in the Favourite mode.

The number of the Favourite channel is also displayed briefly on the picture screen when you change channels, along with the channel name.



Selecting a Channel Position Directly

You can move directly to a particular channel in the Favourite mode by keying in its channel position number 1 to 9 with the numeric keys ① to ⑨.

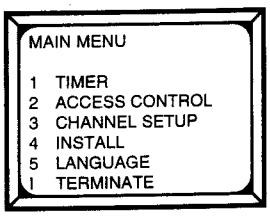
For the channel positions 10 to 29 enter the number as two digits with the numeric keys.
Make sure to key in the second digit within about 2 seconds.

You can also allocate other satellite channels to the 30 preset channel positions (see chapter Selecting Your Favourite Satellite Channels).
You will find a list of the factory-preset channels on the enclosed info sheet.

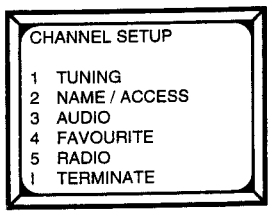
Selecting Your Favourite Satellite Channels

In the Favourite and radio mode you can change the favourite channels to suit your taste using the channels stored in the Normal mode (see chapter Normal Mode).

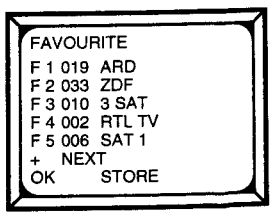
Press the ⓘ key on the handset twice to display the MAIN MENU.



Now press the numeric key ③ and then key ④.
The first 5 channels in the Favourite mode are listed on the screen with their Normal mode number and name against their number in the Favourite mode.
The number of the currently selected channel position is flashing.



Select the desired channel position number with the ◀ and ▶ keys.
After having selected the 5th channel position number in the list press the ▶ key to display the next 5 channel positions, and so on. Press the ◀ key to go back.



Operation

Select your favourite channels:
Use the P+ and P- keys to increase/decrease the Normal mode channel number.
You can also enter the number with the numeric keys.

Repeat these steps until the 30 favourite channel positions are programmed to suit your taste.

Store the setting with the OK key.

Press the i key twice to exit the menu.

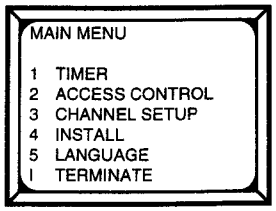
Selecting Your Favourite Radio Channels

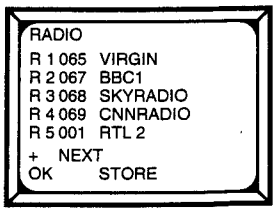
You can select your favourite radio programmes in a similar way.

Press the i key on the handset twice to display the MAIN MENU.

Now press the key 3 and then the key 5 to display the RADIO menu.

Follow the same steps as described in the above section.





Blank Screen

While the radio mode is selected, the TV picture is automatically removed. The screen is blanked and displays only the word RADIO.

Operation

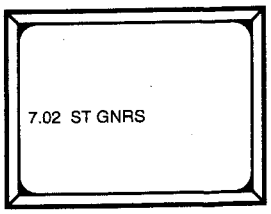
Choosing Alternative Soundtracks

Each TV channel of a satellite is accompanied by a number of soundtracks.
These may be in mono, stereo or in multiple languages for TV broadcasts. In addition, separate radio stations are transmitted on the back of some TV channels on "subcarriers".

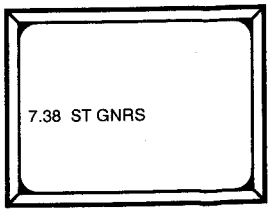
The soundtracks accompanying each TV channel are already preset with the frequencies for the channels listed in the attached satellite stations table. Press the ○ AUDIO key to select another audio transmission.

For the different transmissions broadcast on the various TV soundtracks and audio subcarriers please consult a TV/radio guide.

For stereo transmissions two subcarriers are required. In stereo mode (ST), the second subcarrier of a stereo pair is automatically selected by the receiver along with the first one to receive the full stereo transmission.



As an example:
Select the ARD1 channel (019 in Normal mode and S1 in Favourite mode). The stereo soundtrack for the channel is broadcast as the 7.02 MHz mode and the receiver is preset with this mode for this channel.
Press the ○ AUDIO key and the audio mode is displayed. The message 7.02 ST GNRS will be displayed for about six seconds.
While the audio mode is displayed, press the P+ key. The display changes to 7.38 ST GNRS and you can hear SWF 3 instead of the ARD 1 soundtrack.
If you continue to press the P+ or P- key while in audio selection mode, the receiver will cycle through all 23 audio modes available.



The following 13 audio modes are preset:

6.50 MO	7.38 MO	6.66 ST
6.66 MO	7.56 MO	7.02 ST
6.85 MO	7.74 MO	7.38 ST
7.02 MO	7.79 MO	7.74 ST
7.20 MO		

Ten user audio modes can be set to your own requirements. See the Sound/Radio Tuning section on page 26 for further details.

Abbreviations:

ST:	Stereo mode, i.e. 2 sound channels,
MO:	Mono mode.
GNRS:	Grundig Noise Reduction System.

Normal Mode

The receiver also has a Normal mode to directly acces every channel receivable.

Choose the Normal mode by pressing the ○F key on the handset until the receiver's display shows just three digits.

Use the P+ and P- keys on the handset or the ▲ and ▼ keys on the receiver (under the flap) to alter the channel number step by step.
The number of the channel selected is briefly displayed on the picture screen along with the channel name when the channel is changed.

You can also key in the number directly with the keys ① to ⑨ as two or three digits.
The receiver will wait for about two seconds after the first digit is pressed as well as after the second to enable three digit numbers to be entered.

You can return to the Radio mode at any time by pressing the ○RADIO key.

If you wish to return to the Favourite mode, press the ○F key.

Operation

Recording Satellite Programmes

If your receiver is connected to a video recorder you can record satellite programmes in much the same way as you record programmes on terrestrial TV.

HINT
If the video recorder is only connected via an aerial lead with the receiver, you must make the adjustments described on page 11.

HINT
Note that it is not possible to record one satellite TV channel while watching another channel from satellite. Your receiver can only tune to one channel at a time.

Starting Recording Manually

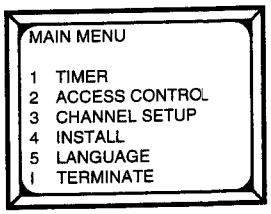
Select the desired channel position on the receiver.

Select the channel position for the satellite receiver on the video recorder and start recording.

Programmed Recordings

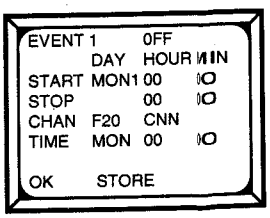
You can programme your receiver so that it receives up to four events within a period of 28 days and passes these on to your video recorder while you are not at home.
Of course the timer of your video recorder must be programmed correspondingly.

Press the ⓘ key on the handset twice to display the MAIN MENU.



Press the key ① to display the EVENT TIMER menu. The digit behind EVENT is flashing.

You can move through the event timer screen using the ▶ and ◀ keys.
You can adjust the desired times either with the P+ and P- keys or by directly entering the numbers (in 24-hr-format).
The setting being altered flashes on the screen.



Operation

You must enter the following data:
The event number and day of recording. The number following the day stands for the week (MON1 = monday first week, MON2 = monday second week);
the start time in hours and minutes;
the stop time in hours and minutes;
the channel position.

Once you have set the times and channel for an event, turn the event on by altering the OFF at the top of the screen to ON with the P+ or P- key.

Press the OK key to store the setting.

Press the i key twice to exit the menu.

The receiver indicates the timer is set by lighting a dot in the front panel display.

The receiver must be in standby when the event time arrives. The receiver automatically turns on, selects the programmed channel and lights a second dot in the front panel display to indicate the timer is in operation.

HINT
It is sensible to set the receiver's event timer to start a little before, and finish a little after, the VCR timer to prevent recording the channel change.

HINT
The current time and day of the week is displayed in the timer menu. If this is not correct it must of course be reset as shown earlier in this manual or the timer will not operate at the correct time.

HINT
If you are using the receiver when the set time arrives, the timer will be overriden and not start the recording.

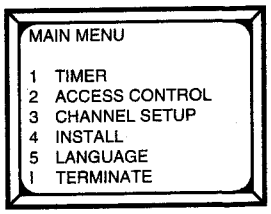
Operation

External Decoder

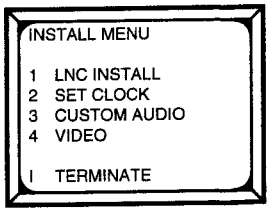
If you wish to watch satellite channels which have a decoding system (eg. Premiere) then you will need to connect an external decoder with a EURO-AV (Scart) lead to the DECODER socket of the receiver.

Once you have connected your decoder, you will need to define for the type of video signal applicable to the decoder. This is done as follows:

Press the ⓘ key on the handset twice to display the MAIN MENU.



Press the key ④ and then the key ④ again to display the VIDEO screen.

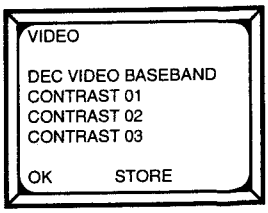


Use the P+ or P- key to select the relevant option for your decoder (see the decoder's manual or consult your dealer).

Preselecting the Contrast

Frequency modulated satellite signals are transmitted with different video amplitudes. You will need to set the correct value for optimum picture contrast.

You can select 3 different preset contrast stages (adjustment range 0 to 7).



To set the contrast levels the ▶ and ◀ keys are used to move between the fields and the P+ and P- keys to scroll through the values.

Press the OK key to store the setting.

Press the ⓘ key twice to exit the menu.

In the TUNING menu you can select the appropriate settings for the received satellite channel (see section Channel Setup).

Operation

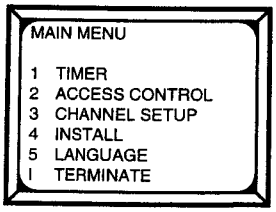
Channel Setup

Your receiver has already been preprogrammed at the factory with the satellite channels listed in the enclosed table (eg. TV channels of the Astra satellites 1 A, 1 B, 1 C, and 1 D) and with the accompanying soundtrack frequencies. The ten radio programme positions R1 to R10 and the 30 favourite channel positions F1 to F30 are preprogrammed at the factory as shown in the table. Of course you can also receive channels which are not preprogrammed in the receiver.

Picture Tuning

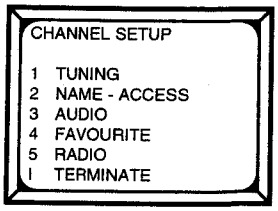
Choose an unused channel position number

Press the ⓘ key on the handset twice to display the MAIN MENU.



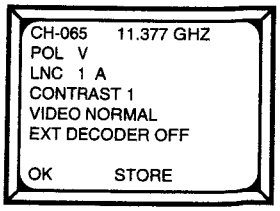
Press the key ③ and then the key ① to display the Tuning menu.

You can adjust the following basic settings: (Main) frequency, polarity, LNC oscillator frequency, contrast, video normal, and type of the external decoder. The current values for these settings are displayed on the screen.



You can move between each setting with the ⓟ and ◀ keys and alter the settings either with the P+ and P- keys or, in the case of the main frequency, by directly entering the number with the numeric keys.

The main frequency and polarity (horizontal/vertical) are the settings which define a satellite's TV channel tuning and can be found, for example, in a satellite TV magazine.



For the LNC oscillator frequency, you have the choice of the following settings:
1 A and 1 B for the 310 model,
in addition 2 A and 2 B for the 320 and 325 models.
For details see the section Settling In/LNC Adjustment.

The contrast setting allows the values 0 (factory presetting), 1, 2 or 3 (user-defined settings). Preselection of the contrast levels 1 to 3 is described in the section "External Decoder/Preselecting the Contrast ".

For the video type you have the choice between NORMAL and INVERT.

For the decoder the options OFF, --V (VIDEO only), A-- (AUDIO only), and A-V (VIDEO and AUDIO) are provided. For the appropriate settings see the decoder's user manual or consult your dealer.

Press the OK key to store the settings.

Press the ⓘ key on the handset twice to exit the menus.

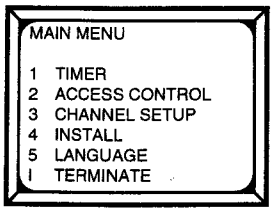
For the reception of the C and S band with 4 or 2.5 kHz LNC's you will need to invert the video signal. Select the required setting INVERT or NORMAL of the VIDEO option.

Channel Names

The satellite stations given in the attached channel list have been preprogrammed with the appropriate settings and channel names.
If you wish to alter the programmed names or give names to new channels, proceed as follows:

Select the desired channel position.

Press the ⓘ key on the handset twice to display the MAIN MENU.

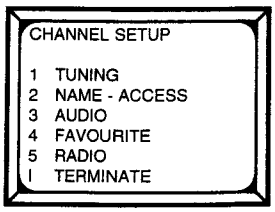


Now press the key ③ and then the key ②.

If the current channel has a name, this will be displayed.

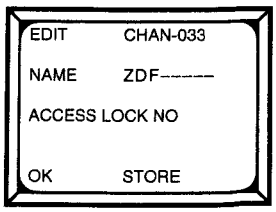
Move to the first character of the name you wish to alter/ enter with the ▶ and ◀ keys. The selected character will flash.

Change the character to the one you require with the P+ and P- keys.
These cycle through the numbers 0, 1, ... 9, the letters of the alphabet A, B, ... Y, Z and a blank space character. A maximum of 8 characters may be used for a name.



When the whole name is entered, press OK to store.

Press the ⓘ key twice to exit the menus.



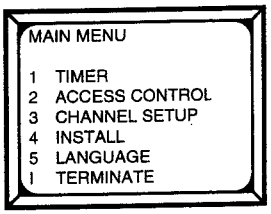
Operation

Sound/Radio Tuning

When an existing channel changes its sound transmission mode (say, from mono to stereo) you will need to alter the receiver's audio tuning.

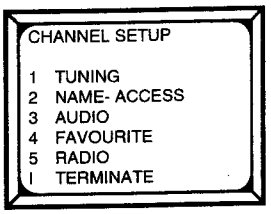
Select the channel position to alter.

Press the ⓘ key on the handset twice to display the MAIN MENU.



Press the key ③ and then the key ③ again.
The screen displays the current audio mode with the sub-carrier frequency (the lower frequency if it's a stereo pair).

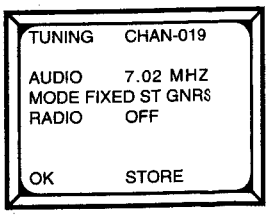
Pressing the P+ and P- keys will cycle through the 23 available modes in the same way as you select the mode with the ○ AUDIO key while watching a channel.



When the correct mode is found press OK to store.

Press the ⓘ key twice to exit the menus.

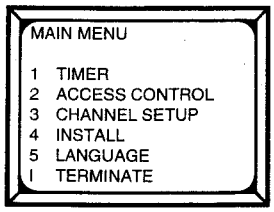
Your receiver is already preprogrammed with a number of satellite channels (see channel list attached). This pre-programming also comprises a number of fixed audio modes available (see list in chapter Choosing Alternative Soundtracks).



Operation

There are also ten custom audio modes which you can set up ypurself if you do not find the required value in memory.

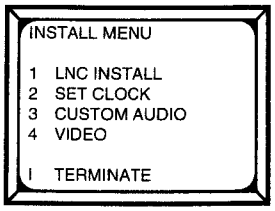
Press the ⓘ key on the handset twice to display the MAIN MENU.



Press the key ④ and then the key ③.

This displays the current frequencies of the ten custom audio modes.

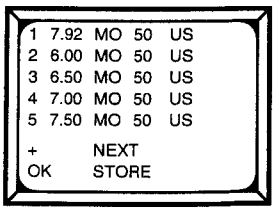
You can move between the ten modes using the ⓑ and ⓐ keys.



Alter the frequency of the mode selected (between 5.50 and 10.00 MHz) with the buttons P+ and P- or by keying in the number directly.

Then select the required mode option MO 50 US, MO J17, MO GNRS, or ST GNRS with the P+ and P- keys.

Press OK to store the setting.



Press the ⓘ key twice to exit the menus.

Abbreviations:

ST:	Stereo mode
MO:	Mono mode
50 µs:	Deemphasis
J17:	Deemphasis
GNRS:	Grundig Noise Reduction System.

Operation

Controlling Access

You can protect your receiver against unauthorized use.

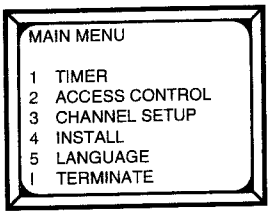
This is possible with all TV channels and a number of settings. These access controls rely on a personal identification number, or PIN.

Setting your own PIN

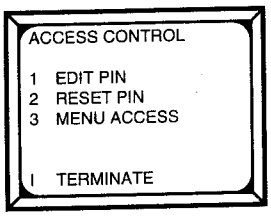
When it leaves the factory, the receiver is programmed with a default PIN code (see back page).

You can alter this code number to whatever you may find easy to remember.

Press the ⓘ key on the handset twice to display the MAIN MENU.



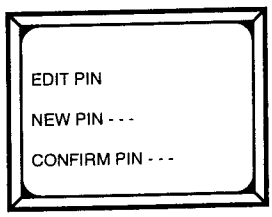
Press the key ② to display the ACCESS CONTROL menu.



Press the key ① to edit the PIN.

Enter the current PIN (the PIN cannot be set without knowing the old number or it could be set by anyone). Each dash represents one digit of the PIN and it changes to full stop as you enter that digit.

Assuming you entered the PIN correctly, the screen now prompts you for the new PIN (NEW PIN) then asks you to enter the PIN a second time for confirmation (CONFIRM PIN).



If you enter two different code numbers, the current PIN is maintained.

HINT
If you incorrectly enter the current PIN, the screen displays INVALID PIN and returns to the Access Control menu.
Pres the ⓘ key twice to exit the menu.

Operation

Resetting the PIN

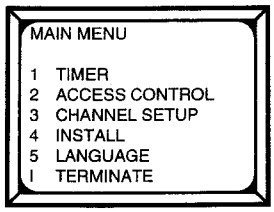
If you forget your own PIN code, you can reset the PIN to the factory default number which can be found on the rear page.

Press the ⓘ key on the handset twice to display the MAIN MENU.

Press the key ② to display the ACCESS CONTROL menu.

Press the key ② again to display the RESET PIN screen.

Use the P+ or P- key to change RESET PIN NO to RESET PIN YES then press OK.

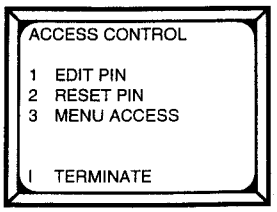


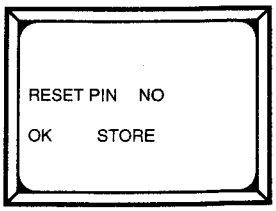
Using the PIN

Some channels show programmes you may not wish other members of your family to watch (say, child endangering programmes).
You can lock or unlock any channel on the receiver.

If you select a channel that has been locked, the receiver blanks the screen and asks for the PIN.
Keying in the correct PIN will reveal the locked channel.

Entering a different number produces the message INVALID KEY. Select another channel in this case.





Channel Access

First select the channel position you wish to lock or unlock.

Press the ⓘ key on the handset twice to display the MAIN MENU.

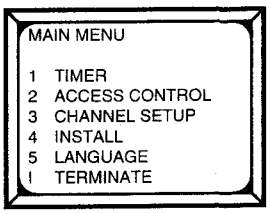
Press the key ③ and then the key ② to display the channel name and access screen.

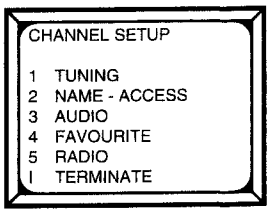
Repeatedly press the ◀ or ▶ key until the menu line ACCESS LOCK NO (channel not locked) or YES (channel locked) is flashing.

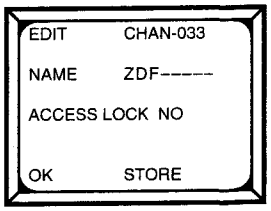
Press P+ or P- to select the desired setting.

Press OK to store the setting.

Press the ⓘ key twice to exit the menus.



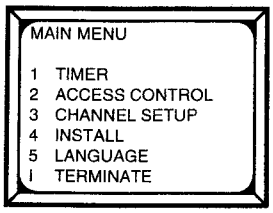




Operation

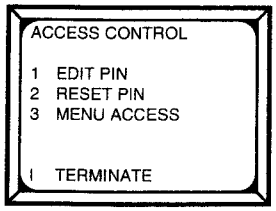
Locking the Menus

Once the receiver has been set up to your tastes, you can prevent anyone altering the tuning and channel naming by locking the menus.
This does not prevent access to the event timer or to the channel or audio mode selection.

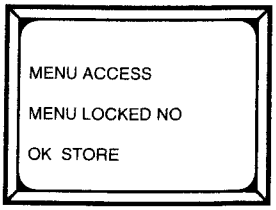


Press the ⓘ key on the handset twice to display the MAIN MENU.

Press the key ② to display the ACCESS CONTROL menu.



Now press the key ③ to display the MENU ACCESS screen.
The menus are initially unlocked so MENU LOCKED NO is flashing.
Change this to MENU LOCKED YES by pressing either P+ or P-.

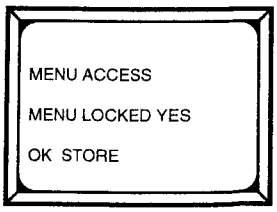


Press OK to store the change.

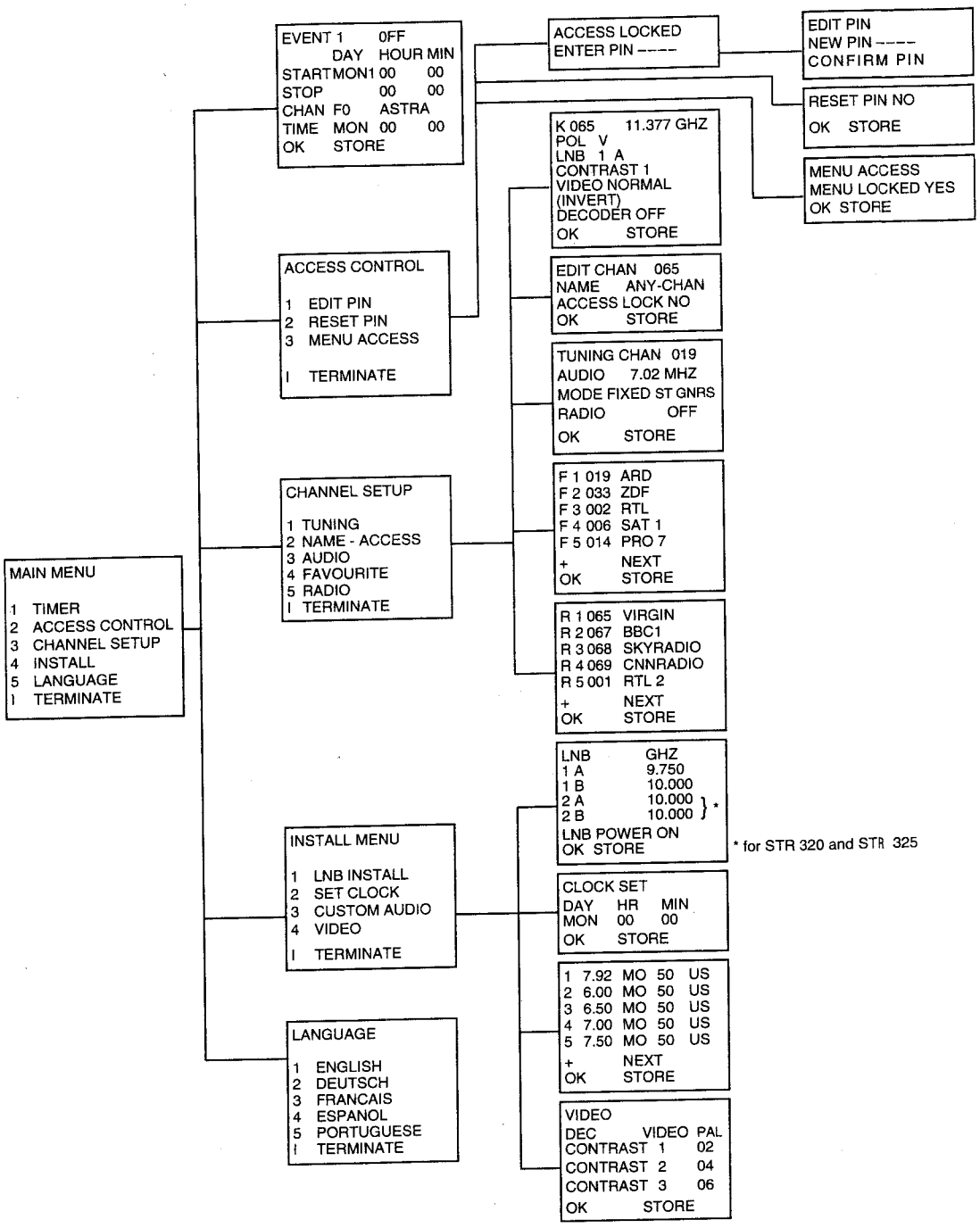
Press the ⓘ key twice to exit the menus.

Attempts to access the tuning menus now require the correct PIN to be entered in the same way as a locked channel.

You can unlock the menus again by repeating the process, altering the MENU LOCKED screen to NO and storing the result with OK.



Menu Flow Chart



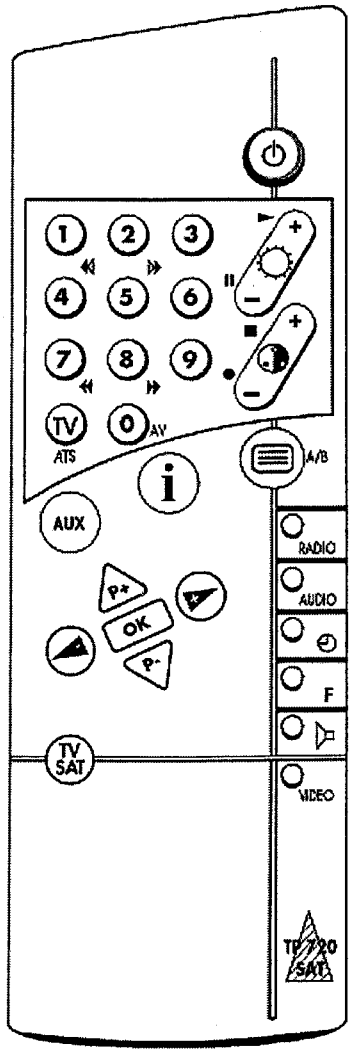
Remote Control of GRUNDIG TV Sets

With the remote control TP 720 SAT you can also control GRUNDIG colour televisIons.

The functions that can actually be carried out via the remote control handset depend, of course, on the technical features of your GRUNDIG television.

Turn on the TV set with its mains switch.
Point the remote control handset at the television.

Press and hold down the ○ TV/SAT key
while pressing the desired function key.



Switching On
Turn on the television by pressing the P+ or P- key or one of the numeric keys ①...⓪.

Channel Selection
Select the channel positions step by step with the P+ or P- key.
The channel positions can also directly be entered with the numeric keys ①...⓪.
Select the channel positions A 1, A 2, etc. by repeatedly pressing the ⓪ AV key.

Adjusting the Volume
Press the ◀ key to decrease the volume.
Press the ▶ key to increase the volume.

Sound On/Off
Press the ○ key.

Adjusting the Brightness
Press the ☼ key.

\djusting the Colour Contrast
ress the ◑ key.

Remote Control of GRUNDIG TV Sets

Calling Up the Menu
Press the ⓘ key.
Use the P+ and P- keys to select functions and confirm with OK.

Activating Teletext
Press the TIMER (▤)TIMER key.
TOP-Text functions can be selected with the ○ keys (blue, yellow, red, green).

Switching Off
Press the ⏻ key.

Universal Remote Control
If you wish to switch the remote control permanently to TV control mode, proceed as follows:

Press and hold down the ○ VIDEO key while pressing the key ⑨ and confirming with the OK key.

No	Basic level
0	SAT (Satellite receiver)
9	TV (Grundig TV set)

Now you must press and hold down the ○ TV/SAT key if you wish to control the satellite receiver.
If you wish to switch the remote control permanently back to satellite receiver mode, proceed as follows:

Press and hold down the ○ VIDEO key while pressing the key ⓪ and confirming with the OK key.

After having changed the battery, the remote control handset is again in its basic setting (direct control of the Sat Receiver, press and hold down the ○ TV/SAT button for the remote control of the TV set).

If you have a Philips, Telefunken or Sony TV set, you can change the remote control handset setting as follows:
Press and hold down the ○ VIDEO button then enter the sequence of digits given in the table and confirm with the OK button. Try out the functions of the different buttons.

No	Transm. mode (TV)	Make (not complete)
90	Grundig 10 Bit	Grundig...
93	RC-5	Philips, ...
94	SGS	Telefunken
95	Sony	Sony

With the digits sequence ⑨⓪ you return to the basic setting: GRUNDIG TV set.

After changing the battery, the remote control is also in the basic setting.

Remote Control of GRUNDIG Video Recorders

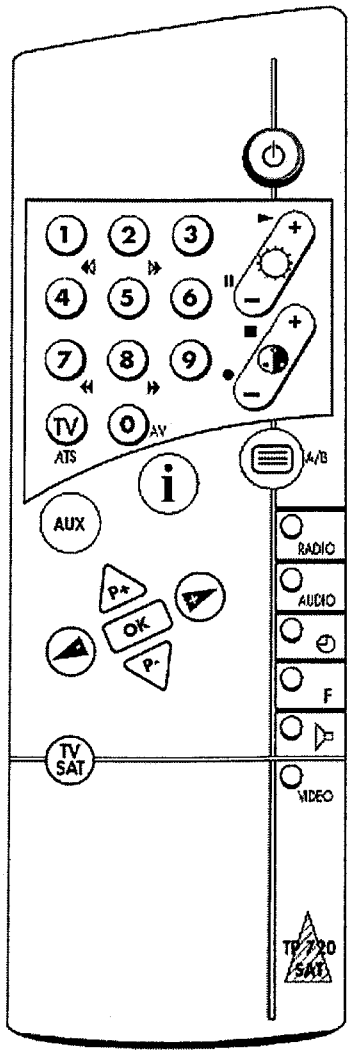
With the remote control TP 720 SAT you can also control GRUNDIG video recorders. Suitable video recorders are listed in the following table.

Point the remote control handset at the video recorder.

Press and hold down the ○ VIDEO key while pressing the desired function key.

The following keys of the remote control handset can be used to control video recorder functions.

- ◀◀ = Forward picture search
- ▶▶ = Reverse picture search
- ● = Recording start
- ■ = Stop
- ◀◀ = Fast rewind
- ▶▶ = Fast forward wind
- ❚❚ = Pause
- ▶ = Play
- P+ = Programme position up
- P− = Programme position down



Universal Remote Control

To enable remote control of video recorders of other makes, proceed as follows:

Press and hold down the ○ VIDEO button then enter the digits sequence given in the table and confirm with the OK button. (Example: digit combination ③③ for a second GRUNDIG video recorder which has been set to the second control level VCR2). Try out the functions of the different buttons.

With the digits sequence ③⓪ you return to the basic setting: GRUNDIG video recorder VCR1. After changing the battery, the remote control is also in the basic setting.

For the remote control of TV sets of other makes, see page 34.

No	Transm. mode (VIDEO)	Make (not complete)
30	Grundig 10 Bit, VCR 1	Grundig, ...
33	Grundig 10 Bit, VCR 2	Grundig, ...
34	RCS-16, VCR 1	various
35	RCS-16, VCR 2	various
36	RC-5, VCR 1	Philips
39	RC-5, VCR 2	Philips
40	AEHA, VCR 1	Blaupunkt, ...
43	AEHA, VCR 2	Blaupunkt, ...
44	Matsushita, VCR 1	Blaupunkt, ...
45	Matsushita, VCR 2	Blaupunkt, ...
46	Thomson-neu, VCR 1	Saba, Nordmende, ...
49	Thomson-neu, VCR 2	Saba, Nordmende, ...
50	Thomson-alt, Modell 1	
53	Thomson-alt, Modell 2	
54	Thomson-alt, Modell 3	
55	JVC, VCR 1	JVC, Telefunken, ...
56	JVC, VCR 2	JVC, Telefunken, ...
59	Nokia	Nokia
60	Löwe	Löwe
63	Sony, VCR 1	Sony
64	Sony, VCR 2	Sony
65	Sony, VCR 3	Sony

Specification

STR 310, STR 320, and STR 325

Connections

TV	1 x 21 Pin Scart
Video recorder	1 x 21 Pin Scart
Decoder	1 x 21 Pin Scart
Audio L/R	2 x RCA phono
LNC input	2 x F-Buchse *The 310 model has 1 LNC input only
LNC switching	P + 13 V/P + 18 V, max. 300 mA
RF input	1 x coax, IEC 169/2, socket
RF output	1 x coax, IEC 169/2, plug
AC mains	2-Pin »fig 8« socket

RF:

Input frequency range	950 to 2050 MHz
Input impedance	75 ohms, nominal
IF bandwidth	27 MHz (-3 dB/c)
FM threshold (static)	≤ 6 dB
RF output	Channels 32 – 42 adjustable

Video:

Output level	1 Volt p-p, clamped, filtered, de-emphasised, negative sync output.
Output impedance	75 ohms, nominal dc-coupled.

Audio:

Subcarrier frequencies	13 presets 10 user programmable presets
Frequency response	40 Hz-18 kHz P+/-2 dB
Audio de-emphasis	Noise Reduction System: GNRS (Grundig Noise Reduction System), Mono 50 µS, Mono J17
THD (at 1 kHz)	≤ 0.2% with 30 kHz deviation

External Decoding:

Selection	Automatic

General:

Power consumption	22 W
AC mains input	185-265 Vac 50/60 Hz
Dimensions	Width: 400 mm; Hight: 68 mm; Depth: 230 mm
Weight	2 kg

Access Control PIN Number(CODE)
Factory: 1515
Edited _____

Additional Information for Units sold in Great Britain

Units sold in GB are suitable for operation from a 240 V AC, 50 Hz mains supply.

In case this appliance is supplied with a Safety Standard Approved mains lead fitted with a non-rewireable 13 Amp mains plug which, if unsuitable for your socket, should be cut off and an appropriate plug fitted by a qualified electrician. The fuse and fuse holder must be removed from the plug as accidental insertion of the redundant plug into a 13 Amp socket is likely to cause an electrical hazard.

Note: The severed plug must be destroyed to avoid a possible shock hazard should it be inserted into a 13 Amp socket elsewhere.

If it is necessary to change the fuse in the non-rewireable plug, the correct type and rating (5 Amp ASTA or BSI approved BS 1362) must be used and the fuse cover must be refitted. If the fuse cover is lost or damaged the lead and plug must not be used until a replacement is obtained. Replacement fuse covers should be obtained from your dealer.

If a non-rewireable plug or a rewireable 13 Amp (BS 1363) plug is used, it must be fitted with a 5 Amp ASTA or BSI approved BS 1362 fuse. If any other type of plug is used it must be protected by a 5 Amp fuse either in the plug or at the distribution board.

Important:
The wires in the mains lead are coloured in accordance with the following code:

BLUE – NEUTRAL
BROWN – LIVE

As the colours of the wires in the mains lead of your appliance may not correspond with the coloured marking identifying the terminals in your plug, proceed as follows:
Connect the BLUE coloured wire to plug terminal marked with the letter "N" or coloured black.
Connect the BROWN coloured wire to the plug terminal marked with a letter "L" or coloured red.
In no circumstance must any of the wires be connected to the terminal marked with a letter "E", earth symbol ⏚ , coloured green or green and yellow.

Replacement mains lead can be obtained from your dealer.